HAER ILL 16-CHIG, 122-

HARR No. IL-64

CHICAGO RIVER BASCULE BRIDGE, CLARK STREET
I&M Canal National Heritage Corridor
North Clark Street crossing the Chicago River
Chicago
Cook County
Illinois

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service Department of the Interior P.O. Box 37127 Washington, D.C. 20013-7127 HISTORIC AMERICAN ENGINEERING RECORD

HAER ILL 16-CHIG, 132-

CHICAGO RIVER BASCULE BRIDGE, CLARK STREET I&M Canal National Heritage Corridor

HAER No. IL-64

Location:

I & M Canal National Heritage Corridor North Clark Street crossing the Chicago

River

Chicago, Cook County, Illinois

UTM: E.447640 N.4637250

Quad: Chicago Loop

Date of Construction:

1929

Designing Engineer:

Loran D. Gayton, City Engineer, and Major Paul Shioler, City Bridge Engineer

Builder:

Substructure, American Bridge Company

Superstructure, Ketler and Elliot

Company

Present Owner:

City of Chicago

Present Use:

Vehicular Bridge

Significance:

The development of the Chicago trunnion bascule bridge occurred during the first three decades of the twentieth century. Despite the controversy over patent infringement -- Joseph E. Strauss charged the City of Chicago engineers with infringing on his patented Strauss-Trunion bascule bridge -- the Chicago bascule received great acclaim within the civil engineering profession.

Project Information:

The Illinois and Michigan Canal was designated a National Heritage Corridor in 1984. The following year HABS/HAER embarked on an extensive inventory and documentation project of the 100 milelong corridor. Field work for this project was concluded in 1988. Final editing of the documentation was

completed in 1992.

Historians:

Charles Scott, Frances Alexander, and

John Nicolay, 1986.

The development of the Chicago trunnion bascule bridge was an important engineering achievement. The trunnion bascule bridge could accommodate the heavy demands of land and water traffic practically and efficiently. A bascule bridge was originally planned for Clark Street in 1916. However, the span was not erected until 1929. Fabricated by the American Bridge Company and erected by the Ketler and Elliot Company, this bridge is virtually identical to the LaSalle Street Bridge. Loran D. Gayton and Major Paul Shioler served as consulting engineers for the city.

The Clark Street Bridge is a single-deck, double-leaf, trunnion bascule bridge. The bridge measures 245'-0" from center to center of the trunnions and has a clear span of 215'-0". Superstructure is a steel pony truss with riveted gusset-plate connections. Width is 72'-0". The abutments are reinforced concrete with a rusticated concrete veneer. On each side of lift span is a bridge tender's house designed in the Beaux-Arts style. The bridge tenders' houses are identical in design with lightly scored concrete veneers, chamfered corners and ornamental pilasters, a sopraporta (over-door) containing a decorative arch, and a mansard-like tin roof with a raised diamond pattern. There are numerous multi-light windows along the facade of the pylons and large, one-over-one-light, double-hung, sash windows below the roof.

SOURCES:

Donald N. Becker, "Development of the Chicago Type Bascule Bridge, " <u>Transactions of the American Society of Civil Engineering</u>, v. 109 (1944): 995-1046.

"Chicago Bascule Bridge- Design and Operating Features,"
Engineering News-Record, v. 85 (September 9, 1920): 508-514.

Chicago Department of Public Works, Chicago Public Works: A <u>History</u> (Chicago: Rand McNally, 1973).

"Dredge Wrecks Drawbridge," <u>Engineering News-Record</u>, v. 102 (May 9, 1929): 769.

"Rapid Erection of Chicago Bascule Bridge in Emergency," Engineering News-Record, v. 103 (October 3, 1929): 527.